

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT APPLICATION** of:

Kuriyama et al.

Application No.: Not Yet Known

Filed: Not Yet Known

For: SPUTTERING POWER-SUPPLY UNIT

Group: Not Yet Known

Examiner: Not Yet Known

Our File: SAS2-PT071

Date: March 12, 2004

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Further to Applicants' Duty of Disclosure pursuant to 37 C.F.R. §1.56, Applicants wish to bring to the Examiner's attention the material cited on the enclosed PTO-1449 form. Copies of the cited documents are enclosed.

References AB - AL are provided in Japanese with English language abstracts. Reference AE is equivalent to U.S. Patent No. 5,651,865 and AG is equivalent to U.S. Patent No. 5,584,974.

**CONCISE EXPLANATION OF THE RELEVENCY OF
THE NON-ENGLISH LANGUAGE REFERENCES**

Reference AB discloses a power supply for sputtering which has a step of detecting an arc discharge and automatically completing such a state.

Reference AC discloses a power supply device for sputtering in which an arc discharge prevention circuit is connected between a power supply and a sputtering device through a cable.

Reference AD discloses an arc interrupting method and device that is capable of shortening interrupt time and recovery time to suppress an adverse influence of an arc upon an object to be processed.

Reference AF discloses a power supply device for sputtering which is capable of stably preventing an abnormal discharge from a small load capacity to a large load capacity.

Reference AH discloses a sputtering device for setting a current, which is supplied to a target at the start of plasma discharge, to be not higher than that supplied at the time of steady-state deposition to prevent an inrush current from being generated.

Reference AJ discloses a power supply device for sputtering which is capable of applying a reverse voltage pulse for a given period of time to prevent an arc discharge from being continuously generated and preventing a reverse-direction arc discharge from being generated by the reverse voltage pulse.

Applicant: Kuriyama et al.
Application No.: Not Yet Known

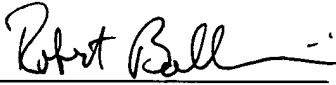
Reference AK discloses a power supply device for sputtering which is capable of stable sputtering at not higher than discharge starting pressure.

The relevancy of references AI and AL is set forth in the attached International Search Report of Parent Application No. PCT/JP02/09827.

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the PTO-1449 form indicating his consideration of the cited materials.

Respectfully submitted,
Kuriyama et al.

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RJB/ns
Enclosures (15)

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| FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary) | | | | | | | | | | ATTY. DOCKET NO. SAS2-PT071 | | | SERIAL NO. Not Yet Known | | | | | |
| | | | | | | | | | | APPLICANT Kuriyama et al. | | | | | | | | |
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| U.S. PATENT DOCUMENTS | | | | | | | | | | | | | | | | | | |
| EXAMINER INITIAL | | | DOCUMENT NUMBER | | | | | | | DATE | NAME | | | | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE | |
| | AA | | 6 | 1 | 1 | 3 | 7 | 6 | 0 | 12/2000 | Kuriyama et al. | | | | | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | | | | | | | | | | | | |
| | | DOCUMENT NUMBER | | | | | | | DATE | COUNTRY | | | | CLASS | SUBCLASS | TRANSLATION | | |
| | | 2 | 1 | 9 | 4 | 8 | 3 | 1 | 08/1990 | Japan | | | | | | X* | | |
| | | 5 | 3 | 1 | 1 | 4 | 1 | 8 | 11/1993 | Japan | | | | | | X* | | |
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| | | 1 | 0 | 1 | 3 | 7 | 9 | 2 | 06/2000 | EP | | | | | | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | | | | | | | | | | | | |
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

* English Translation of Abstract Provided.